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TRANSMITTAL OKINFORMATION DISCLOSURE STATEMENT  JAN 0 8 200 Under 37 CFR 1.97(b) or 1.97(c))  Docket No.  14919										
In Re	In Re Appropriation Of: TRADENING TR									
	Serial No. Filing Date Examiner Group Art Unit									
(	09/967,206	unassigned	unassigned							
Title:	Title: BROADENED-SPECULAR REFLECTION AND LINEAR SUBSPACES									
	FOR OBJECT R	RECOGNITION								
		Assistant Comm	idress to: nissioner for Patents							
		wasningt	on, D.C. 20231							
		37 CF	FR 1.97(b)							
1. 🛚	The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application; within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or before the mailing date of a first Office Action on the merits, whichever event occurs last.									
		37 CF	FR 1.97(c)							
2.	2. The Information Disclosure Statement submitted herewith is being filed after three months of the filing of a national application, or the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or after the mailing date of a first Office Action on the merits, whichever occurred last but before the mailing date of either:									
	1.	a Final Action under 37 CFR 1.11	13, or							
	2.	a Notice of Allowance under 37 C	CFR 1.311,							
	whichever occurs first.									
	Also submitted herewith is:									
	a certification as specified in 37 CFR 1.97(e);									
		OR								
		et forth in 37 CFR 1.17(p) for s CFR 1.97(c).	submission of an Information Discl	osure Statement						

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TO A NOMITTAL OF	INFORMATION DISCLO	SUDE STATEMENT	Docket No.					
PRANSIVITIAL OIL	SURE STATEMENT							
JAN 0 8 2050 Hider 37 CFR 1.97(b) or 1.97(c)) 14919								
In Re Application Of:	KARVEL K. THORNBER, et al.							
Serial No.	Filing Date	Examiner	Group Art Unit					
09/967,206	September 28, 2001	unassigned	unassigned					
05/50/,200	September 20, 2001	unassigned	unussigneu					
Title: BROADENED-S	SPECULAR REFLECTION AND	LINEAR SUBSPACES						
FOR OBJECT R	RECOGNITION							
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Cartificate of Transmission by Facsimile*   Certificate of Mailing by First Class Mail								
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*This certificate may deposit account.	only be used if paying by							
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		Dated: December 19, 2001	• •					
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Paul J. Esatto, Jr.								
Registration No. 30,749	•	·						
Scully, Scott, Murphy & I	rresser	•						
400 Garden City Plaza								
Garden City, New York	11530	•	·					
(516) 742-4343	·							
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cc:								

**PATENTS** 

## N THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Karvel K. Thomber, et al.

**Docket:** 14919

Serial No: 09/967,206

Art Unit: unassigned

Filed: September 28, 2001

Dated: December 19, 2001

For:

**BROADENED-SPECULAR REFLECTION** 

AND LINEAR SUBSPACES FOR OBJECT

RECOGNITION

Assistant Commissioner for Patents United States Patent and Trademark Office Washington, D.C. 20231

## **INFORMATION DISCLOSURE STATEMENT**

Sir:

In accordance with 37 C.F.R. §§ 1.97 and 1.98, it is requested that the following references, which are also listed on the attached Form PTO-1449, be made of record in the above-identified case.

1. Brelstaff et al., "Detecting Specular Reflections Using Lambertian Constraints," *International Conference on Computer Vision*, pages 297-302, 1988.

## CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner of Patents and Trademarks, Washington, D.C. 20231 on December 19, 2001

Dated: December 19, 2001

Janet Grossman

- 2. Coleman et al., "Obtaining 3-Dimensional Shape of Textured and Specular Surfaces Using Four-Source Photometry," *Physics-Based Vision Principles and Practice, Shape Recovery*, pages 180-199, 1992.
  - 3. Ramamoorthi et al., "On the Relationship Between Radiance and Irradiance: Determining the Illumination From Images of a Convex Lambertian Object," to appear in *Journal of the Optical Society of America A*.
  - 4. Cabral et al., "Bidirectional Reflection Functions from Surface Bump Maps," *Computer Graphics*, Vol. 21, No. 4, pages 273-281, 1987.
  - 5. Hallinan, "A Low-Dimensional Representation of Human Faces for Arbitrary Lighting Conditions," *IEEE Conf. On Computer Vision and Pattern Recognition*, pages 995-999, 1999.
  - 6. Marschner et al., "Image-Based BRDF Measurement Including Human Skin," In Proceedings of 10<sup>th</sup> Eurographics Workshop on Rendering, pages 139-152, 1999.
  - 7. Yuille et al., "Determining Generative Models of Objects Under Varying Illumination: Shape and Albedo from Multiple Images Using SVD and Integrability," International Journal of Computer Vision, pages 1-35, 1999.
- 8. Ramamoorthi et al., "A Signal-Processing Framework for Inverse Rendering," Computer Graphics Proceedings, Annual Conference Series, pages 117-128, 2001.
- 9. R. Basri, et al., "Lambertian Reflectance and Linear Subspaces" NEC Research Institute, Inc. Technical Report, dated August 16, 2000, pages 1-33.
- 10. R. Basri, et al., "Lambertian Reflectance and Linear Subspaces" NEC Research Institute, Inc. Technical Report, dated December 13, 2000, pages 1-27.

Applicants are submitting a copy of the above-cited references. The relevance of reference numbers 1-3, has been described in the specification.

Inasmuch as this Information Disclosure Statement is being submitted in accordance with the schedule set out in 37 C.F.R. § 1.97(b), no statement or fee is required.

Respectfully submitted,

Paul J. Esatto, Jr.

Registration No.: 30,749

Scully, Scott, Murphy & Presser 400 Garden City Plaza Garden City, New York 11530 (516) 742-4343

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	Coleman et al., "Obtaining 3-Dimensional Shape of Textured and Specular Surfaces Using Four-Source Photometry," Physics-Based Vision Principles and Practice, Shape Recovery, pages 180-199, 1992.								
i i i	Ramamoorthi et al., "On the Relationship Between Radiance and Irradiance: Determining the Illumination From Images of a Convex Lambertian Object," to appear in Journal of the Optical Society of America A.								
Cabral et al., "Bidirectional 273-281, 1987.	Cabral et al., "Bidirectional Reflection Functions from Surface Bump Maps," Computer Graphics, Vol. 21, No. 4, pages 273-281, 1987.								
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